



National Environmental Achievement Track

Application Form

Rhodia Inc. - Spartanburg, SC

Name of facility

Rhodia Inc. - Cranbury, NJ

Name of parent company (if any)

399 Sims Chapel Road

Street address

Post Office Box 2643

Street address (cont.)

Spartanburg, SC 29306 - Street address

City/State/Zip code 29304-2643 - Postal address

Give us information about your contact person for the
National Environmental Achievement Track Program.

Name Howard E.C. (Hal) Brown, QEP, REM, CET

Title Environmental Manager

Phone (864) 585-8393 xt30

Fax (864) 585-7561

E-mail hal.brown@us.rhodia.com

Why do we need this information?

EPA needs background information on your facility to evaluate your application.

What do you need to do?

- Provide background information on your facility.
- Identify your environmental requirements.

Section A

Tell us about your facility.

1 What do you do or make at your facility?

Surfactants (surface active agents)

Non-ionic ethoxylates, propoxylates
and block (capped) polymers

Phosphate esters

Ether sulfates

Performance blends to customer specifications

2 List the Standard Industrial Classification (SIC) codes or North American Industrial Classification System (NAICS) codes that you use to classify business at your facility.

SIC

2843

NAICS

3 Does your company meet the Small Business Administration definition of a small business for your sector?

☐ Yes ☒ No

4 How many employees (full-time equivalents) currently work at your facility?

☐ Fewer than 50

☒ 50-99

☐ 100-499

☐ 500-1,000

☐ More than 1,000

Section A, continued

- 5 Does your facility have an EPA ID number(s) ?

☒ Yes ☐ No

If yes, list in the right-hand column.

SCD 055 212 922

29301GFCHMSIMSC

USC00488

- 6 Identify the environmental requirements that apply to your facility. Use the Environmental Requirements Checklist, at the back of the instructions, as a reference. List your requirements to the right *or* enclose a completed Checklist with your application.

- 7 Check the appropriate box in the right-hand column.

☐ I've listed the requirements above.

☒ I've enclosed the Checklist with my application.

- 8 Optional: Is there anything else you would like to tell us about your facility?

First chemical manufacturing site admitted to S.C. Environmental Excellence Program (11/98); first chemical manufacturing facility to win the S.C. Governor's Pollution Prevention Award (9/99); wastewater pretreatment plant selected as Facility of the Year, Environmental Protection magazine (11/99)

Why do we need this information?

Facilities need to have an operating Environmental Management System (EMS) that meets certain requirements.

What do you need to do?

- Confirm that your EMS meets the Achievement Track requirements.
- Tell us if you have completed a self-assessment or have had a third-party assessment of your EMS.

Section B

Tell us about your EMS.

- 1 Check **yes** if your EMS meets the requirements for each element below as defined in the instructions.

a. Environmental policy _____ ☒ Yes

b. Planning _____ ☒ Yes

c. Implementation and operation _____ ☒ Yes

d. Checking and corrective action _____ ☒ Yes

e. Management review _____ ☒ Yes

- 2 Have you completed at least one EMS cycle (plan-do-check-act)? ☒ Yes

- 3 Did this cycle include both an EMS and a compliance audit? ☒ Yes

- 4 Have you completed an objective self-assessment or third-party assessment of your EMS? ☒ Yes

If yes, what method of EMS assessment did you use?

☒ Self-assessment

☐ GEMI

☒ Other

☐ CEMP

Rhodia MSRR

☐ Third-party assessment

☐ ISO 14001 Certification

☐ Other _____

Section C

Why do we need this information?

Facilities need to show that they are committed to improving their environmental performance. This means that you can describe past achievements and will make future commitments.

Tell us about your past achievements & future commitments.

What do you need to do?

Refer to the Environmental Performance Table in the instructions to answer questions 1 and 2.

- 1 Describe your past achievements for at least two environmental aspects. If you need more space than is provided, attach copies of this page.

Note to small facilities: If you qualify as a small facility as defined in the instructions, you need to report past achievement for at least one environmental aspect.

First aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)?		What is the current level?	
	Quantity	Units	Quantity	Units
Waste Filter Cake from WWTP to landfill	54.67	tons	0.00	tons

i. How is the current level an improvement over the previous level?

We have completely eliminated -- for the last fourteen months -- a special wastestream that averaged over 300 tpy as recently as three years ago [See documentation attached from the landfill]

ii. How did you achieve this improvement?

Improved process management, data collection, and recirculation of sludge to achieve "steady-state" operating conditions; i.e., no mechanical methods used to extract excess solids from the system.

Section C, continued

Second aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)?		What is the current level?	
	Quantity	Units	Quantity	Units
Water BOD released in effluent to SSSD	50,439	pounds	36,732	pounds

i. How is the current level an improvement over the previous level?

Overall wastewater pretreatment system performance has achieved virtually optimal operating conditions -- systemic efficiency improvements are reflected in lowered BOD released to the POTW

ii. How did you achieve this improvement?

System optimization allows us to safely remain within permit limits [See attached documentation from the SSSD] yet reduce solids discharged across the board: BOD, COD, & TSS.

- 2 Select at least four environmental aspects (no more than two from any one category) from the Environmental Performance Table in the instructions and then tell us about your future commitments. If you need more space than is provided, attach copies of this page.

Note to small facilities: If you are a small facility, you need to make commitments for at least two environmental aspects in two different categories.

First aspect you've selected

a. What is the aspect?

Reduction of COD in effluent discharged to POTW.

b. Is this aspect identified as significant in your EMS?

☒ Yes ☐ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A: Absolute value

~2,000,000 pounds annually
(Quantity/Units)

☐ Option B: In terms of units of production or output

(Quantity/Units)

Section C, continued

d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A:
Absolute value

<1,500,000 pounds annually by 2002

(Quantity/Units)

☐ Option B:
In terms of units
of production
or output

(Quantity/Units)

e. How will you achieve this improvement?

We can achieve this reduction by improving pretreatment plant operations; specifically, by using our internal recycling process more effectively, so that our excess solids (as expressed as COD) are removed by an enhanced natural biological process.

Also, there are new, ongoing process sewer & sump mechanical upgrades that will dramatically reduce the amount of spilled product that can reach our pretreatment plant in the first place. Third, changes in our production mix will favor more production of products that have weaker COD values in reactor washouts.

SECOND

~~Third~~ aspect you've selected

a. What is the aspect?

Water -- BOD released in effluent to POTW

b. Is this aspect identified as significant in your EMS?

☒ Yes ☐ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

☒ Option A:
Absolute value

36,722 pounds/year

(Quantity/Units)

☐ Option B:
In terms of units
of production
or output

(Quantity/Units)

d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute level or in terms of units of production or output.

☒ Option A:
Absolute value

25,000 pounds/year

(Quantity/Units)

☐ Option B:
In terms of units
of production
or output

(Quantity/Units)

e. How will you achieve this improvement?

Maintain/improve biomass performance

(see above). According to our best

estimates using current data, 12 - 13

tpy is the theoretical maximum re-

duction in BOD released on an annual

basis.

Section C, continued

~~Fourth~~ aspect you've selected

- a. What is the aspect?
- b. Is this aspect identified as significant in your EMS?
- c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.
- d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute level or in terms of units of production or output.

Waste - total solid waste to landfill

☒ Yes ☐ No

☒ Option A:
Absolute value $\frac{1999 - 217.5 \text{ tpy}}{(\text{Quantity/Units})}$

Option B:
In terms of units
of production
or output

(Quantity/Units)

X **Option A:**
Absolute value $\frac{\text{less than 200 tpy}}{(\text{Quantity/Units})}$

Option B:
In terms of units
of production
or output

(Quantity/Units)

e. How will you achieve this improvement?

Maintain zero shipments status from WWTP;
monitor/improve (decrease) other solid
wastes going to landfill

Section C, continued

Fourth aspect you've selected

a. What is the aspect?

Aspect: Reduction in total tonnage shipped offsite for disposal at our landfill.

b. Is this aspect identified as significant in your EMS? ☒ Yes ☐ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

Option A:
Absolute value

~225 tons annually

(Quantity/Units)

☒ Option B:
In terms of units
of production
or output

(Quantity/Units)

d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute level or in terms of units of production or output.

Option A:
Absolute value

~200 tons annually by 2002.

(Quantity/Units)

☒ Option B:
In terms of units
of production
or output

(Quantity/Units)

e. How will you achieve this improvement?

In addition to the 150-250 tons (minimum) annually of special waste from our pretreatment plant that have already been eliminated, we will increase the effectiveness of our existing office paper recycling, aluminum can recycling, and, most important, our cardboard recycling programs. There will be an even more active effort to receive more raw materials in composite cardboard shell/plastic liner style tote containers. We will also changeover the packaging mix of our biggest volume dry raw material from more bags/less Super-sacks (which are recyclable as well), to almost no bags/all Supersacks. This alone will eliminate several tons of empty bags now going to the landfill. Another change in product design/capital \$\$ commitment is the installation of more new bulk storage tanks. This will eliminate several thousand empty steel drums every year that have to go to the landfill. (Some of our steel drums -- and almost 100% of our plastic drums -- can be recycled, and we are already doing so. However, some drummed raw materials are packaged in non-recycleable drums (particularly from our overseas suppliers).

Why do we need this information?

Facilities need to demonstrate their commitment to public outreach and performance reporting. You should have appropriate mechanisms in place to identify community concerns, to communicate with the public, and to provide information on your environmental performance.

What do you need to do?

- Describe your approach to public outreach.
- List three references who are familiar with your facility.

Section D

Tell us about your public outreach and reporting.

- 1 How do you identify and respond to community concerns?

Membership in LEPC (leadership role)

Membership in Environmental Interest

Forum (peer-to-peer)

Active sponsorship of Arkwright VFD

Ongoing involvement with Re-Genesis

Project (community renewal)

- 2 How do you inform community members of important matters that affect them?

Several employees are also members of
the local community

Open-house celebration events

Orientation & training for Arkwright
VFD on site

- 3 How will you make the Achievement Track Annual Performance Report available to the public?

☒ Website www.rhodia.com

☒ Newspaper

☒ Open Houses

☐ Other

Section D, continued

4 Are there any ongoing citizen suits against your facility?

☐ Yes

☒ No

If yes, describe briefly in the right-hand column.

5 List references below.

	Organization	Name	Phone number
Representative of a Community/ Citizen Group	Re-Genesis	Harold N. Mitchell	(864) 542-8420
State/Local regulator	SCDHEC - App. III	Ronald R. Garrett	(864) 596-3800
Other community/local reference	SSSD - IWT	John Holcomb	(864) 582-3250

Section E

Application and Participation Statement

On behalf of Rhodia Inc. - Spartanburg, SC
[my facility],

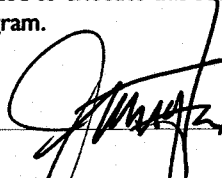
I certify that

- I have read and agree to the terms and conditions, as specified in the National Environmental Achievement Track Description;
- I have personally examined and am familiar with the information contained in this Application (including, if attached, the Environmental Requirements Checklist). The information contained in this Application is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete, and I have no reason to believe the facility would not meet all program requirements;
- My facility has an environmental management system (EMS), as defined in the Achievement Track EMS requirements, including systems to maintain compliance with all applicable federal, state, and local environmental requirements, in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;
- My facility has conducted an objective assessment of its compliance with all applicable federal, state, and local environmental requirements, and the facility has corrected all identified instances of potential or actual noncompliance;
- Based on the foregoing compliance assessment and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, and local environmental requirements;

I agree that EPA's decision whether to accept participants into or remove them from the National Environmental Achievement Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior facility manager and fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is applying to this program.

Signature/Date



August 3, 2000

Printed Name/Title

James M. Trafton, Plant Manager

Facility Name

Rhodia Inc. - Spartanburg, SC

Facility Street Address

399 Sims Chapel Road, Spartanburg, SC 29306

Facility ID Numbers

SCD 055 212 922
29301GFCHMSIMSC
USC00488

National Environmental Achievement Track

Environmental Requirements Checklist

The following *Checklist* is provided to assist facilities in answering *Section A, Tell us about your facility,* Question 6. The *Checklist* is given to help facilities identify the major federal, state, tribal, and local environmental requirements applicable at their facilities. The *Checklist* is not intended to be an exhaustive list of all environmental requirements that may be applicable at an individual facility.

If you use this *Checklist* and choose to submit it with your application, fill in your facility information below and enclose the completed *Checklist* with your application (see instructions).

Facility Name: Rhodia Inc.

Facility Location: Spartanburg, SC

Facility ID Number(s): SCD 055 212 922; 29301GFCHMSIMSC
(attach additional sheets if necessary)

Air Pollution Regulations

Check All
That Apply

- | | | | |
|-----|--|---|---|
| 1. | National Emission Standards for Hazardous Air Pollutants (40 CFR 61) | | G |
| 2. | Permits and Registration of Air Pollution Sources | X | G |
| 3. | General Emission Standards, Prohibitions and Restrictions | X | G |
| 4. | Control of Incinerators | | G |
| 5. | Process Industry Emission Standards | | G |
| 6. | Control of Fuel Burning Equipment | X | G |
| 7. | Control of VOCs | | G |
| 8. | Sampling, Testing and Reporting | G | |
| 9. | Visible Emissions Standards | X | G |
| 10. | Control of Fugitive Dust | G | |
| 11. | Toxic Air Pollutants Control | | G |
| 12. | Vehicle Emissions Inspections and Testing | | G |

Other Federal, State, Tribal or Local Air Pollution Regulations Not Listed Above
(identify)

13. N/A G

14. _____ G

Hazardous Waste Management Regulations

- | | | |
|----|--|---|
| 1. | Identification and Listing of Hazardous Waste (40 CFR 261) | G |
| | - Characteristic Waste | G |
| | - Listed Waste | G |
| 2. | Standards Applicable to Generators of Hazardous Waste (40 CFR 262) | G |
| | - Manifesting | G |
| | - Pre-transport requirements | G |
| | - Record keeping/reporting | G |
| 3. | Standards Applicable to Transporters of Hazardous Waste (40 CFR 263) | G |
| | - Transfer facility requirements | G |
| | - Manifest system and record-keeping | G |
| | - Hazardous waste discharges | G |
| 4. | Standards for Owners and Operators of TSD Facilities (40 CFR 264) | G |
| | - General facility standards | G |
| | - Preparedness and prevention | G |
| | - Contingency plan and emergency procedures | G |
| | - Manifest system, Record keeping and reporting | G |
| | - Groundwater protection | G |
| | - Financial requirements | G |
| | - Use and management of containers | G |
| | - Tanks | G |
| | - Waste piles | G |
| | - Land treatment | G |
| | - Incinerators | G |
| 5. | Interim Status Standards for TSD Owners and Operators (40 CFR 265) | G |
| 6. | Interim Standards for Owners and Operators of New Hazardous Waste
Land Disposal Facilities (40 CFR 267) | G |
| 7. | Administered Permit Program (Part B) (40 CFR 270) | G |

Other Federal, State, Tribal or Local Hazardous Waste Management Regulations Not Listed Above (*identify*)

- | | | |
|----|-----------------|---|
| 8. | _____ N/A _____ | G |
| 9. | _____ | G |

Hazardous Materials Management

- | | | | |
|----|---|---|---|
| 1. | Control of Pollution by Oil and Hazardous Substances (33 CFR 153) | X | G |
| 2. | Designation of Reportable Quantities and Notification of Hazardous Materials Spill (40 CFR 302) | X | G |
| 3. | Hazardous Materials Transportation Regulations (49 CFR 172-173) | X | G |
| 4. | Worker Right-to-Know Regulations (29 CFR 1910.1200) | G | X |
| 5. | Community Right-to-Know Regulations (40 CFR 350-372) | X | G |

Other Federal, State, Tribal or Local Hazardous Materials Management Regulations Not Listed Above (identify)

- | | | | |
|----|-----|--|---|
| 6. | N/A | | G |
| 7. | | | G |

Solid Waste Management

- | | | | |
|----|---|--|---|
| 1. | Criteria for Classification of Solid Waste Disposal Facilities and Practices (40 CFR 257) | | G |
| 2. | Permit Requirements for Solid Waste Disposal Facilities | | G |
| 3. | Installation of Systems of Refuse Disposal | | G |
| 4. | Solid Waste Storage and Removal Requirements | | G |
| 5. | Disposal Requirements for Special Wastes | | G |

Other Federal, State, Tribal or Local Solid Waste Management Regulations Not Listed Above (identify)

- | | | | |
|----|-----|--|---|
| 6. | N/A | | G |
| 7. | | | G |

Water Pollution Control Requirements

- | | | | |
|----|---|---|---|
| 1. | Oil Spill Prevention Control and Countermeasures (SPCC) (40 CFR 112) | X | G |
| 2. | Designation of Hazardous Substances (40 CFR 116) | X | G |
| 3. | Determination of Reportable Quantities for Hazardous Substances (40 CFR 117) | X | G |
| 4. | NPDES Permit Requirements (40 CFR 122) | | G |
| 5. | Toxic Pollutant Effluent Standards (40 CFR 129) | G | |
| 6. | General Pretreatment Regulations for Existing and New Sources (40 CFR 403) | | G |
| 7. | Organic Chemicals Manufacturing Point Source Effluent Guidelines and Standards (40 CFR 414) | | G |

- Other Federal, State, Tribal or Local Water Pollution Control Regulations Not Listed Above (identify)**

- ## Drinking Water Regulations

- Other Federal, State, Tribal or Local Drinking Water Regulations Not Listed Above**
(identify)

- ## Toxic Substances

- ### Application for the National Environmental Achievement Track

- | | | | |
|----|--|---|---|
| | Requirements (40 CFR 704) | X | G |
| 2. | Import and Export of Chemicals (40 CFR 707) | X | G |
| 3. | Chemical Substances Inventory Reporting Requirements (40 CFR 710) | | G |
| 4. | Chemical Information Rules (40 CFR 712) | | G |
| 5. | Health and Safety Data Reporting (40 CFR 716) | X | G |
| 6. | Pre-Manufacture Notifications (40 CFR 720) | X | G |
| 7. | PCB Distribution Use, Storage and Disposal (40 CFR 761) | | G |
| 8. | Regulations on Use of Fully Halogenated Chlorofluoroalkanes (40 CFR 762) | | G |
| 9. | Storage and Disposal of Waste Material Containing TCDD (40 CFR 775) | | G |

Other Federal, State, Tribal or Local Toxic Substances Regulations Not Listed Above (identify)

- | | | | |
|-----|-----|--|---|
| 10. | N/A | | G |
| 11. | | | G |

Pesticide Regulations

- | | | | |
|----|---|---|---|
| 1. | FIFRA Pesticide Use Classification (40 CFR 162) | | G |
| 2. | Procedures for Disposal and Storage of Pesticides and Containers (40 CFR 165) | | G |
| 3. | Certification of Pesticide Applications (40 CFR 171) | | G |
| 4. | Pesticide Licensing Requirements | | G |
| 5. | Labeling of Pesticides | | G |
| 6. | Pesticide Sales, Permits, Records, Application and Disposal Requirements | | G |
| 7. | Disposal of Pesticide Containers | G | |
| 8. | Restricted Use and Prohibited Pesticides | | G |

Other Federal, State, Tribal or Local Pesticides Regulations Not Listed Above (identify)

- | | | | |
|-----|-----|--|---|
| 9. | N/A | | G |
| 10. | | | G |

Environmental Clean-Up, Restoration, Corrective Action

- | | | | |
|----|---|--|---|
| 1. | Comprehensive Environmental Response, Compensation and Liability Act (Superfund) (identify) | | |
| | N/A | | G |
| | | | G |

2. RCRA Corrective Action (*identify*)

N/A

G

G

Other Federal, State, Tribal or Local Environmental Clean-Up, Restoration, Corrective Action Regulations Not Listed Above (*identify*)

3. N/A

G

4.

G



PALMETTO LANDFILL
A WASTE MANAGEMENT COMPANY

251 New Hope Road
Wellford, South Carolina 29385
(864) 439-9184
(864) 439-0097 Fax

June 26, 2000

Rhodia, Inc.
Hal Brown
Post Office Box 2643
Spartanburg, South Carolina 29304-2643

RE: Profile WMNA 049765 for Activated Sludge

Dear Hal:

I am writing in recognition of your facilities effort to minimize your waste streams. Attached you will find the history for the past four years of the activated sludge material. During these years you have spent considerable efforts to reduce the amount of material coming to Palmetto Landfill. As you can tell by the history we have not received any sludge from this profile at your facility since July 8, 1999.

We want to commend you on your environmental achievements. This effort saves precious space in the landfill.

Should you have any questions, on the history or would need additional information, please do not hesitate to contact me at (864) 439-8426. We value the relationship we have with Rhodia and look forward to building upon our partnership.

Sincerely,
Palmetto Landfill

A handwritten signature in cursive script that reads 'David W. Pepper'.

David W. Pepper, P.G.
District Manager

Enc.

1996

<u>DATE</u>	<u>WEIGHT</u>
01/05/96	24480 LBS
01/22/96	27100 LBS
02/02/96	22460 LBS
02/13/96	25800 LBS
02/21/96	23820 LBS
03/04/96	23860 LBS
03/13/96	24540 LBS
03/21/96	21600 LBS
03/29/96	26080 LBS
04/03/96	20220 LBS
04/10/96	20960 LBS
04/18/96	25660 LBS
04/26/96	25080 LBS
05/03/96	21760 LBS
05/10/96	21100 LBS
05/22/96	21880 LBS
06/03/96	28240 LBS
06/17/96	27860 LBS
06/26/96	22440 LBS
07/16/96	23600 LBS
08/08/96	24540 LBS
10/03/96	22160 LBS
11/05/96	35300 LBS
11/13/96	25100 LBS
11/26/96	24880 LBS

GRAND TOTAL 1996 (25 LOADS 299.43 TONS)

1997 CONTINUED

<u>DATE</u>	<u>WEIGHT</u>
10/28/97	18700 LBS
11/10/97	20120 LBS
11/19/97	21960 LBS
11/28/97	21640 LBS
12/13/97	23260 LBS

GRAND TOTAL 1997 (17 LOADS 186.21 TONS)

1998

01/31/98	22920 LBS
02/12/98	20700 LBS
02/27/98	18420 LBS
04/29/98	24660 LBS
12/22/98	22640 LBS

GRAND TOTAL 1998 (5 LOADS 54.67 TONS)

1999

02/17/99	25420 LBS
04/07/99	25500 LBS
07/08/99	20720 LBS

GRAND TOTAL 1999 (3 LOADS 35.82 TONS)

1997

01/02/97	21820 LBS
02/21/97	21720 LBS
04/11/97	21240 LBS
04/28/97	19420 LBS
05/16/97	22900 LBS
06/16/97	23000 LBS
07/15/97	21420 LBS
08/04/97	20100 LBS
09/13/97	21200 LBS
09/19/97	22600 LBS
10/06/97	26780 LBS
10/17/97	24540 LBS

Governor's Pollution Prevention Award



Presented to

Howard E.C. (Hal) Brown

for significant achievement
in the reduction of hazardous wastes

Jim Hodges
James H. Hodges, Governor of South Carolina

2/18/2000
Date

**SOUTH CAROLINA
ENVIRONMENTAL EXCELLENCE PROGRAM**

certifies that

Rhodia, Inc.
Spartanburg

is a member in good standing

November 1998 - November 2000

in recognition of its corporate commitment to
protecting and preserving South Carolina's environment.

**SOUTH CAROLINA
ENVIRONMENTAL
EXCELLENCE PROGRAM**

[Signature]

Thomas Dobson, Ph.D.
Executive Director
Institute of Public Affairs
University of South Carolina

[Signature]

**Chairman
Environmental
Advisory Committee**

CERTIFICATE OF RECOGNITION

SPARTANBURG SANITARY SEWER DISTRICT


AWARDED TO:

RHODIA

For Superior Environmental Compliance, 1999

July 19, 2000

Date


Graham W. Rich, G.M.

Environmental Department Five Year Operating Summary (1995 - 1999)							Average
Annual Production	1995	1996	1997	1998	1999	% Change	
Pounds Produced	65,289,000	71,886,600	76,082,780	82,218,000	86,558,000	5.28%	76,406,876
Influent Flow (gls.)	12,825,495	13,630,148	13,459,313	14,203,836	11,750,318	-17.27%	13,173,822
Effluent Flow (gls.)	13,247,501	13,583,098	12,562,438	12,531,278	14,222,000	13.49%	13,229,263
Influent COD (lbs)	1,485,409	1,725,159	1,957,773	2,343,329	2,336,828	-0.28%	1,969,700
Effluent COD (lbs)	755,945	603,517	703,191	792,617	625,069	-21.14%	696,068
Apparent COD Removal (%)	49.11%	65.02%	64.08%	66.18%	73.25%	10.68%	63.53%
Effluent COD Pounds/10K Production	115.78	83.95	92.42	96.40	72.21	-25.09%	92.16
Effluent BOD (lbs.)	61,715	36,531	31,944	39,401	32,500	-17.51%	40,418
Effluent BOD Pounds/10K Production	9.45	5.08	4.20	4.79	3.75	-21.65%	5.46
Effluent TSS (lbs.)	17,259	8,902	26,399	26,410	21,350	-19.16%	20,064
Effluent Oil & Grease (lbs.)	1,025	581	704	627	605	-3.51%	708
Enriched Seed Sludge (gls)	No Data					-68.71%	44,558
Enriched Seed Sludge (lbs)						-68.75%	371,726
Digester Decant Discharged (gls)						-80.79%	88,958
DHEC Lab Analytical Costs						-12.40%	\$3,074.87
Pounds Shipped Offsite	239,000	303,060	338,140	444,660	185,890	-58.20%	302,150
Pounds Waste/1K Production	3.66	4.22	4.44	5.41	2.15	-60.29%	3.98
Total Waste Disposal Cost	\$17,585.10	\$22,185.55	\$19,429.51	\$25,934.72	\$8,193.50	-68.41%	\$18,665.68
Total Waste Disposal Cost/Ton	\$147.16	\$146.41	\$114.92	\$116.65	\$88.15	-24.43%	\$122.66
Total Waste \$\$/10K Production	\$2.69	\$3.09	\$2.55	\$3.15	\$0.95	-69.99%	\$2.49
SWS Water In (gls.)	17,525,640	20,641,808	18,783,776	21,778,492	24,831,356	14.02%	20,712,214
SWS Water In Cost (\$)	\$22,874.74	\$29,484.16	\$29,902.49	\$38,332.19	\$47,604.00	24.19%	\$33,639.52
SSSD Discharge (gls.)	12,943,000	13,656,900	12,262,700	12,095,800	14,660,200	21.20%	10,191,680
SSSD Discharge Cost (\$)	\$30,220.08	\$32,602.81	\$30,135.21	\$29,725.25	\$36,773.89	23.71%	\$31,891.45
SSSD BOD Charge (lbs.)	133,464	56,952	51,135	50,439	30,147	-40.23%	64,427
SSSD BOD Charge (\$)	\$18,524.95	\$7,904.55	\$7,097.60	\$7,001.00	\$4,184.64	-40.23%	\$8,942.55
SSSD Misc. Charges (\$)	\$3,013.48	\$5,281.67	\$1,429.10	\$1,436.60	\$1,442.60	0.42%	\$2,520.69
Total SWS/SSSD Costs (\$)	\$74,633.25	\$75,273.19	\$68,564.40	\$76,495.04	\$90,004.95	17.66%	\$76,994.17
SWS & SSSD \$/10K Production	\$11.43	\$10.47	\$9.01	\$9.30	\$10.40	11.78%	\$10.12
Discarded Containers (tons)	40.11	31.82	48.37	57.63	74.34	29.00%	50.45
Discarded Containers (\$)	\$4,975.56	\$3,838.70	\$6,269.93	\$5,617.09	\$7,811.82	39.07%	\$5,702.62
Production Filtrate (tons)	146.65	94.35	98.31	125.73	101.72	-19.10%	113.35
Production Filtrate (\$)	\$6,770.22	\$5,061.50	\$5,915.79	\$9,018.45	\$8,593.80	-4.71%	\$7,071.95
WWTP Filter Cake (tons)	247.16	298.13	208.53	54.67	23.11	-57.73%	166.32
WWTP Filter Cake (\$)	\$11,445.04	\$12,924.48	\$10,870.35	\$5,549.49	\$3,273.51	-41.01%	\$8,812.57
Miscellaneous (tons)	16.86	0.78	12.29	44.72	7.96	-82.20%	16.52
Miscellaneous (\$)	\$4,907.36	\$278.01	\$2,128.44	\$5,666.01	\$498.98	-91.19%	\$2,695.76
Total Solid Waste to PLF (tons)	450.78	425.08	367.50	282.75	217.50	-23.08%	348.72
Total Solid Waste to PLF (\$)	\$28,098.18	\$22,102.69	\$25,184.51	\$25,851.04	\$25,746.18	-0.41%	\$25,396.52
Total PLF \$\$/10K Production	\$4.30	\$3.07	\$3.31	\$3.14	\$2.97	-5.40%	\$3.36
						Reduction > 10%	

Environmental Cost (\$\$)/Production Ton (1995 -1999)

